pray Schedule
or Home Orchards

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Spray Schedule for Home Orchards

The spray schedule in this leaflet was prepared for the home gardener. It does not meet the exacting requirements of the commercial fruit grower. Number of recommended materials and time of application are a minimum.

Many commercial combinations of fungicides and insecticides are available. These are effective in controlling insects and diseases listed on the label, if used as the manufacturer recommends.

To get good pest control, thorough spray coverage of trees is necessary. It is hard to get complete coverage with hand equipment, but it can be done. Good coverage means thoroughly wetting the leaves, twigs, and branches. When mixed with water, some chemicals such as DDT, methoxychlor, Sevin, wettable sulfur, and ziram tend to settle out. Shake or stir the spray mixture frequently during application.

Mature fruit will not have excess chemical residues if you observe the proper interval between the last spray and harvest, as indicated on the manufacturer's label. *All* fruits should be washed before eating.

Pesticides Can Be Used Safely

The pesticides suggested in this leaflet have been selected on the basis of their effectiveness, availability, and safety. These pesticides, with the possible exception of the mercury fungicides, are among the less hazardous to the user. All can be used safely if common sense precautions are observed.

Follow the manufacturer's precautions on the pesticide label. These are not intended to frighten the user, but to impress upon him the need for careful use of pesticides.

- **Store pesticides in a safe place, out of reach of children.**
- **Destroy empty containers or those without labels.**
- **Do not keep pesticides in beverage bottles or other containers which previously have been used for food or drink.**
- **When mixing and using pesticides avoid getting them on the skin. Wash the hands after spraying.**

Spray Schedule

Time of Application	Insect or Disease	Materials and Amount Per 1 Gallon of Water*
Apple and Pear		
Early spring (dormant) ..... Just before buds open.	Blister mites, scale, scab.	Lime sulfur 1⅔ cups. (WARNING: lime sulfur will discolor painted buildings.)
Pink ..... Just before blossoms open.	Scab, mildew.	Lime sulfur ½ cup.
Petal fall ..... When blossom petals have fallen.	Scab, mildew, codling moth, aphid, spider mite, pear psylla.	DDT or methoxychlor 2 T plus malathion 2 t 50% emulsion concentrate, plus wettable sulfur 6 T.
Three weeks later	Codling moth, spider mites, aphids, pear psylla, scab, mildew.	Same as petal fall.
Three weeks later	Codling moth, spider mites, pear psylla.	DDT or methoxychlor 2 T plus malathion 2 t 50% emulsion concentrate.
Four weeks later	Codling moth, spider mites, pear psylla.	DDT or methoxychlor or Sevin 2 T plus malathion 2 t 50% emulsion concentrate.†
Four weeks later ..... Apply this spray to late-maturing varieties only.	Codling moth, spider mites.	DDT or methoxychlor or Sevin 2 T plus malathion 2 t 50% emulsion concentrate.†
Peach		
Dormant ..... Two sprays December 15 and before January 15.	Leaf curl.	Lime sulfur 1⅔ cups, or Puratized Agricultural Spray 1 T, or TAG 1½ t.
Bloom stage ..... Spray once per week during bloom. Apply first spray when first bloom appears.	Brown rot blossom blight.	Captan 2 T.
One week after blossom petals have fallen	Coryneum blight.	Wettable sulfur 6 T.
Summer spray ..... July 10 to 15, and again 3 weeks later.	Peach and prune root borer. Young trees are especially susceptible to injury.	Apply DDT ½ cup to lower limbs and trunk and around base of tree.
Ten to 14 days before picking	Brown rot, western spotted cucumber beetle (western Oregon only).	Methoxychlor or Sevin 2 T plus wettable sulfur 6 T. If spider mites become a problem, add malathion 2 t 50% emulsion concentrate or Kelthane 2 T.
After picking (September or October)	Coryneum blight.	Copper spray plus spreader-sticker (follow manufacturer's directions).
Cherry		
Bloom stage ..... Spray once per week during bloom. Apply first spray when first bloom appears.	Brown rot blossom blight.	Captan 2 T.
Early summer ..... When fruit flies first emerge—date announced by county agents. Usually when Royal Anns first turn red. If rains occur, add wettable sulfur for brown rot control. If heavy rain follows spraying, repeat spray.	Cherry fruit fly, brown rot.	Use methoxychlor 3 T or Sevin 2 T. Apply every 7 to 10 days until harvest. Flies rest on foliage other than cherry, so spray as much of surrounding foliage as practical. (5% methoxychlor or 10% Sevin dust is also effective, but will require a good duster for thorough application.)
Summer sprays (if pests appear)	Aphids, mites, slugs.	Malathion 2 t 50% emulsion concentrate.

* The amount of active ingredient of a pesticide may vary with the name-brand. Ask your pesticide dealer to help you calculate the correct dosages of his product to meet the above recommendations. † If DDT or Sevin + malathion fail to control spider mites, add Kelthane. T = tablespoonful, t = teaspoonful.

Formulations and Concentrations of Materials to Use in Spray Schedules

Material	Formulation and Concentration
Captan	50% wettable powder
DDT	50% wettable powder
Diazinon	25% emulsifiable concentrate
Kelthane	18½% wettable powder
Lime sulfur	Liquid
Malathion	50% emulsifiable concentrate
Methoxyclor	50% wettable powder
*Puratized Agricultural Spray	Liquid (5% phenyl mercuri triethanol ammonium lactate)
Sevin	50% wettable powder
*TAG	Liquid (10% phenyl mercuric acetate)
Wettable sulfur	Wettable powder
Ziram	76% wettable powder

* These mercury-containing fungicides are poisonous—keep them from children and animals. Do not apply these materials after fruit is formed.

Prune and Plum

Aphids are a frequent problem, and they may be controlled with diazinon or malathion at the rate of 2 t per gallon of water. Treatment is most effective if the materials are applied before aphids cause the leaves to curl.

These trees are susceptible to peach and prune root borers. Follow recommended control listed under peaches.

If brown rot is severe on maturing fruit, dust with sulfur or spray with wettable sulfur.

Apricot

Very susceptible to Coryneum blight on the fruit. For control, spray with captan or ziram one week after petals have fallen. Spray again in September or October with coppers, as recommended under peaches.

Apricot trees are often injured by sulfur sprays or dusts.

Nuts

It is necessary for commercial growers to control diseases and insect pests of walnuts and filberts. In most instances, it is impractical for the home owner to attempt these control practices on large walnut trees.

Walnuts. Bacterial blight causes black blotches on walnuts. It is impractical to attempt control of this disease with hand sprayers.

Aphids frequently become abundant on walnut trees and a nuisance when the honeydew which they secrete drips on sidewalks or spots the finish of parked cars. On the smaller trees, aphids can be controlled with malathion applied by hand sprayers.

Filberts. Bacterial blight may girdle and kill young trees. The disease may kill many buds and nut-bearing twigs in older trees. Plant disease-free trees. Spray young trees in late summer (August) before the fall rains, with a fixed copper at the rate of 6T per gallon or 3 pounds per 50 gallons of spray. Spray again in the fall when three-fourths of the leaves are off the trees, and again in early spring when leaf buds are breaking open.

Aphids also attack filbert trees and can be controlled with malathion, diazinon, or Sevin. Filbert moth larvae cause "wormy" filberts. This insect is controlled by applying Sevin spray or dust about July 10 and again the first week in August. Leafroller larvae may attack filberts in late April and May and can be controlled with Sevin or diazinon.

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